

SEVERE LOCAL STORMS, JANUARY, 1929

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the Annual Report of the Chief of Bureau]

Place	Date	Time	Width of path, yards ¹	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Sealy, Tex.-----	4	6:15 p. m.	100	-----	\$10,000	Tornado-----	Buildings damaged over path 10 miles long; 5 persons injured.	Official, U. S. Weather Bureau.
Bay City, Tex. (5 miles south of).-----	4	8 p. m.	150	5	-----	do-----	Everything in path demolished; 14 persons injured.	Do.
Jeffersonville, Vt.-----	5	P. m.	-----	-----	-----	Wind-----	A number of barns demolished; some cattle killed; roofs blown off.	Burlington Free Press (Vt.)
Wilkes-Barre, Pa., and vicinity.-----	5	P. m.	-----	-----	-----	Wind and rain-----	Considerable property damaged; traffic congested; many small fires.	Official, U. S. Weather Bureau.
Buffalo, N. Y.-----	6	-----	-----	1	-----	Severe wind-----	Considerable damage to buildings, street signs, etc.; minor damage in other parts of State.	Do.
Sealy, Tex. (near).-----	10	3:20 a. m.	4 mi.	-----	-----	Hail-----	Considerable damage over path 6 miles long.	Do.
Scott County, Mo., through southern Illinois and southwestern Indiana.-----	18	-----	-----	6	-----	Series of tornadoes and high winds.	Many barns demolished; residences damaged; wire systems impaired; a number of school children injured.	Official, U. S. Weather Bureau; Evansville Journal (Ind.).
Kentucky-----	18	P. m.	-----	4	1,250,000	Tornadoic winds---	Widespread damage throughout State; hundreds of barns and contents destroyed; homes, business houses, wire systems, and timber damaged; 5 persons injured.	Official, U. S. Weather Bureau.
Shelby, Miss.-----	18	-----	-----	1	-----	High wind-----	Considerable property damage.	Do.
Buffalo, N. Y.-----	19	P. m.	-----	1	-----	do-----	Considerable damage to plate-glass windows, signs, etc.	Do.
Wisconsin (east-central counties).-----	22	-----	-----	-----	-----	do-----	Overhead wires and small buildings damaged; smokestack blown down; traffic impeded by snow.	Do.
Parkersburg, W. Va.-----	25	-----	-----	-----	-----	do-----	Overhead wires damaged.	Do.

¹ "Mi." signifies miles instead of yards.

627.41(73) RIVERS AND FLOODS

By R. E. SPENCER

General rains beginning on the 16th and continuing, with high temperatures, until late evening of the 19th over the region east of the Mississippi River and north of the Ohio, resulted in unimportant floods in the lower Great Lakes drainage and in moderate rises in several of the northern tributaries of the Ohio. Of the latter only those in the Allegheny River and the Wabash-White system were considerable, and even these did comparatively little damage. Along the Allegheny, where the presence of ice resulted in two gorges of minor importance between Franklin and Parkers Landing, unavoidable losses amounted to \$5,000, while at Lock No. 7 the safe removal of \$50,000 worth of machinery was effected through the timeliness of the Weather Bureau flood warnings. Losses in the more sustained Wabash-White rise reached \$101,500, of which \$40,800 was in tangible property (bridges, highways, etc.) and \$49,000 in farm property. In addition to a considerable saving in livestock for which no estimate could be obtained, property valued at \$19,000 was saved along the Wabash-White through the flood warnings.

A second period of substantial rains extending from the Middle West States southward to the Gulf on the 23d-24th was followed by moderate rises in several streams in that section—notably in the Illinois, the lower Ohio, the White and Black of Arkansas, and the Sulphur of Texas.

On the Sulphur River the losses (combined with those of a somewhat lesser rise earlier in the month) amounted to \$11,000, and the savings through flood warnings to \$33,000. Reports from other districts report some inconvenience owing to flooded highways, but no material damage.

Losses in the Tombigbee River rise of the 31st amounted to \$700.

[All dates in January except as otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
EAST GULF DRAINAGE					
Tombigbee: Lock 4, Demopolis, Ala.	Feet 39	31	31	Feet 39.5	31
GREAT LAKES DRAINAGE					
Maumee: Fort Wayne, Ind.	15	19	20	15.7	19
St. Joseph: Montpelier, Ohio.	10	23	23	15.6	23
Sandusky:	10	19	23	12.6	21
Upper Sandusky, Ohio.	13	19	20	15.8	20
Tiffin, Ohio.	7	19	21	8.1	21
MISSISSIPPI DRAINAGE					
Allegheny:					
Franklin, Pa.	15	20	20	15.0	20
Parkers Landing, Pa.	18	19	19	20.0	19
Lock 5, Freeport, Pa.	24	19	21	28.6	19
Lock 4, Natrona, Pa.	24	19	20	28.0	19
Ohio:					
Evansville, Ind.	35	26	Feb. 2	38.5	29
Dam 48, Cypress, Ind.	35	27	(¹)	37.2	30
Shawneetown, Ill.	35	27	(¹)	40.3	31
Shenango: Sharon, Pa.	9	20	21	12.0	20
Tuscarawas: Coshocton, Ohio.	8	20	20	11.0	20
Walhonding: Walhonding, Ohio.	8	18	20	12.0	19
Scioto:					
Larue, Ohio.	11	25	27	13.3	26
Prospect, Ohio.	10	20	21	12.1	20
Circleville, Ohio.	10	20	21	14.5	20
Chillicothe, Ohio.	16	21	22	17.0	21
Glentany: Delaware, Ohio.	9	19	19	9.6	19
Stillwater: Pleasant Hill, Ohio.	13	19	19	13.3	19
Green: Lock No. 2, Rumsey, Ky.	34	29	31	34.7	30
Wabash:					
Lafayette, Ind.	13	19	25	16.6	20
Covington, Ind.	16	20	27	20.2	25
Terre Haute, Ind.	16	24	28	17.6	26
Vincennes, Ind.	14	25	(¹)	15.8	28
Mount Carmel, Ill.	16	21	(¹)	23.0	29, 30
White: Decker, Ind.	18	22	(¹)	23.5	28-30
White, East Fork:					
Seymour, Ind.	10	19	27	13.3	26
Williams, Ind.	10	23	(¹)	14.7	26
Shoals, Ind.	20	23	(¹)	26.4	26
White, West Fork:					
Anderson, Ind.	12	20	20	12.6	20
Elliston, Ind.	19	19	29	24.0	23
Edwardsport, Ind.	15	20	(¹)	19.0	24
Tennessee: Riverton, Ala.	33	28	29	33.9	29
Elk: Fayetteville, Tenn.	14	25	28	21.0	26

¹ Continued at end of month.

[All dates in January except as otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
MISSISSIPPI DRAINAGE—continued					
Illinois:	<i>Feet</i>			<i>Feet</i>	
Morris, Ill.	13	23	24	13.6	23
Peru, Ill.	14	(1)	(1)	19.5	24, 25
Henry, Ill.	10	23	(1)	12.7	28
Peoria, Ill.	18	25	(1)	19.6	30
Havana, Ill.	14	(1)	2	14.7	Dec. 26
		6	(1)	16.8	31
Beardstown, Ill.	14	(1)	2	14.8	12/27, 28
		23	(1)	17.5	29-31
Pearl, Ill.	12	25	(1)	13.3	30, 31
St. Francis: St. Francis, Ark.	17	20	(1)	24.5	30
Arkansas: Yancopin, Ark.	29	28	(1)	30.5	31
Petit Jean: Danville, Ark.	20	7	7	20.1	7
		25	27	23.3	26
White:					
Calico Rock, Ark.	18	25	26	26.7	25
Batesville, Ark.	23	25	28	31.7	25
Newport, Ark.	26	26	(1)	29.0	29
Georgetown, Ark.	22	29	(1)	24.4	31
Black:					
Williamsville, Mo.	11	26	26	12.3	26
Poplar Bluff, Mo.	14	25	28	16.5	27
Corning, Ark.	11	19	(1)	14.1	31
Black Rock, Ark.	14	25	(1)	24.6	26
CACHE: Patterson, Ark.	9	27	(1)	9.6	31
Sulphur:					
Ringo Crossing, Tex.	20	6	9	26.5	7
		25	29	28.4	28
Finley, Tex.	24	9	15	26.2	18
		28	(1)	26.7	29
Ouachita:					
Arkadelphia, Ark.	12	26	27	14.1	26
Camden, Ark.	30	29	(1)	31.7	30
WEST GULF DRAINAGE					
Trinity:					
Dallas, Tex.	25	25	25	27.1	25
Trinidad, Tex.	28	28	(1)	29.8	30
Guadalupe: Victoria, Tex.	16	5	6	25.9	5

¹ Continued at end of month.² Continued from last month.**MEAN LAKE LEVELS**

NOTE.—The printing of the table Mean Lake Levels, appearing since 1914 in this space, is suspended until further notice. Readers of the REVIEW who use the data, if there be such, are asked to communicate with the editor giving their reasons for its continuance.—*Editor.*

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, JANUARY, 1929

By J. B. KINCER

General summary.—During the first decade the passage of a storm across the country seriously interfered with outdoor operations and was rather hard on livestock in some western sections. A generous snow cover was deposited by this storm in several interior districts and furnished ample protection against the cold which followed. Rains relieved the droughty conditions in most Southeastern States, though southern Florida remained dry. Moderate freezes occurred in the southern trucking sections of that State, but no serious damage was reported. Lower temperatures in the far Southwest were beneficial for citrus fruits and no damaging frosts occurred in south Pacific areas. Increased feeding of livestock was necessary in parts of the great western grazing area.

During the second decade the weather was again rather unfavorable for seasonal work on farms. Frequent rains in the South prevented plowing and other field operations, but there was still a deficiency of precipitation in southern Florida. The temperatures in this section were mostly favorable, although the mildness caused some apprehension as to the possible premature forcing of peach bloom, especially in Georgia. In the Northwest and most Rocky Mountain sections the period was cold, stormy, and rather hard on livestock, though the snow was beneficial for grain fields. Rain was needed in

the Southwest, especially in western Texas and New Mexico, but in other sections there were some helpful falls. Much of the interior of the country was bare of snow.

During the last decade much the coldest weather of the season prevailed in many sections from the central and northern Mississippi Valley westward, preventing seasonal outside operations and causing suffering among livestock. The January snowfall was unusually heavy in the western Lake region and extreme upper Mississippi Valley, with all previous records for the month broken in some places. The southeastern part of the country again experienced unusually mild weather for the season, with peach buds reported swelling in the Fort Valley district of Georgia and early varieties of fruit beginning to bloom in extreme southern Alabama, but the reaction to colder at the close of the month was beneficial in retarding premature development. Frequent rains in the South prevented much field work and very little preparation for spring planting could be made. Moisture was still needed in southern Florida and much of the Southwest.

Small grains.—During the first decade a light to generous snowfall preceded the cold weather over much of the winter wheat belt, which afforded a protection against the severe weather. In Nebraska the snow drifted badly and left some sections uncovered, while in Kansas the ground was bare in the northwestern part and wheat was frozen down. Conditions were also rather precarious in those parts of the Ohio Valley insufficiently covered and there was a lack of covering in the middle Atlantic area. In Montana and the Rocky Mountain districts most wheat fields had some protection and in the Pacific Northwest there was an ample covering when the coldest weather occurred; low temperatures retarded growth in the Southern States.

The weather was rather unfavorable for winter wheat during the second decade in many sections of the interior, though no extensive or widespread damage was reported. In the more eastern portions of the belt abnormally high temperatures caused a rapid disappearance of the snow cover and the ground was generally bare in much of the Ohio Valley; there was some ice in parts of Illinois and heavy rains caused local flooding in both Indiana and Ohio. From the northern portions of Illinois and Missouri northward wheat fields were generally well protected and also in the northern Great Plains, the Pacific Northwest, and most Rocky Mountain sections. In the main western belt the ground was bare with wheat frozen to the ground in western Kansas and some heaving in the southeast, but apparently without serious injury. In Oklahoma the crop was making slow growth, but in the Southern States winter grains made good progress under favorable conditions.

During the last decade the weather was mostly unfavorable for winter wheat, except in the more northern portions where there was a good snow cover. There was much ice in parts of Illinois and the northern third of Indiana, with a considerable cover in much of Missouri. In Kansas the ground continued bare in the western and southern portions, with the wheat frozen to the ground; most fields were still bare in Nebraska. Conditions were better in the far Northwest, and in the South the weather was largely favorable, but in the middle Atlantic area fields were mostly bare.

Miscellaneous crops.—There was some improvement in pastures in the Gulf section during the month, and an adequate protection for meadows prevailed in the more northern sections of the country. Considerable yard feeding was necessary in the northern Great Plains, with